

Battaglia, Frank

From: Battaglia, Frank
Sent: Thursday, August 08, 2019 4:06 PM
To: Joseph F Guarnaccia; Jeffrey P. Crawford (jeff.crawford@dem.ri.gov)
Cc: Rick Kowalski; Cote, Glen; Tisa, Kimberly; Battaglia, Frank
Subject: RE: post-cap well and probe cap penetrations

Joe, your procedure for the geoprobe penetration is acceptable but for the well installation using an auger we would also like the well to be sealed a little above and below the synthetic liner to ensure no leakage through the liner. From your discussion, we are not sure if that is the case. Please call me if you have any questions.

Frank Battaglia
617 918-1362

From: Joseph F Guarnaccia <joseph.guarnaccia@basf.com>
Sent: Tuesday, August 06, 2019 4:45 PM
To: Battaglia, Frank <battaglia.frank@epa.gov>; Jeffrey P. Crawford (jeff.crawford@dem.ri.gov) <jeff.crawford@dem.ri.gov>
Cc: Rick Kowalski <rkowalski@aeiconsultants.com>; Cote, Glen <gcote@cecinc.com>
Subject: post-cap well and probe cap penetrations

Frank and Jeff.

To address groundwater we will be installing a series of wells using augers for ISCO application and performance monitoring and characterizing using push technology (geoprobe). In some areas we will encounter the synthetic geotextile and impermeable liner and we thus need to consider this penetration to maintain the purpose for the liner placement: i.e., limit water infiltration over areas with >10 ppm PCBs remaining in-situ. To maintain the integrity of the cap and minimize cap disturbance, BASF proposes the following procedure:

- For geoprobe penetrations: the probe will be pushed through the cap using its pointed tip which will minimize liner damage. Upon rod removal, the hole will be grouted to the surface. The continuous grout fill coupled with the expanding nature of the grout will effectively seal the liner penetration.
- For well installations using an auger: prep the location by digging through the soil cover to expose the geotextile and liner material and prep the penetration by cutting an "X" in the synthetic material and advance the auger so that it does not disturb the synthetic materials. Once the well is installed a concrete collar will be installed in contact with the synthetic liner materials to both seal the penetration and provide a base for well expression (flush mount or with stickup).

Please let me know if this is an acceptable procedure so we can complete our preparation of the well installation work plan.

Regards
Joseph Guarnaccia Ph. D.
EHS Remediation Specialist

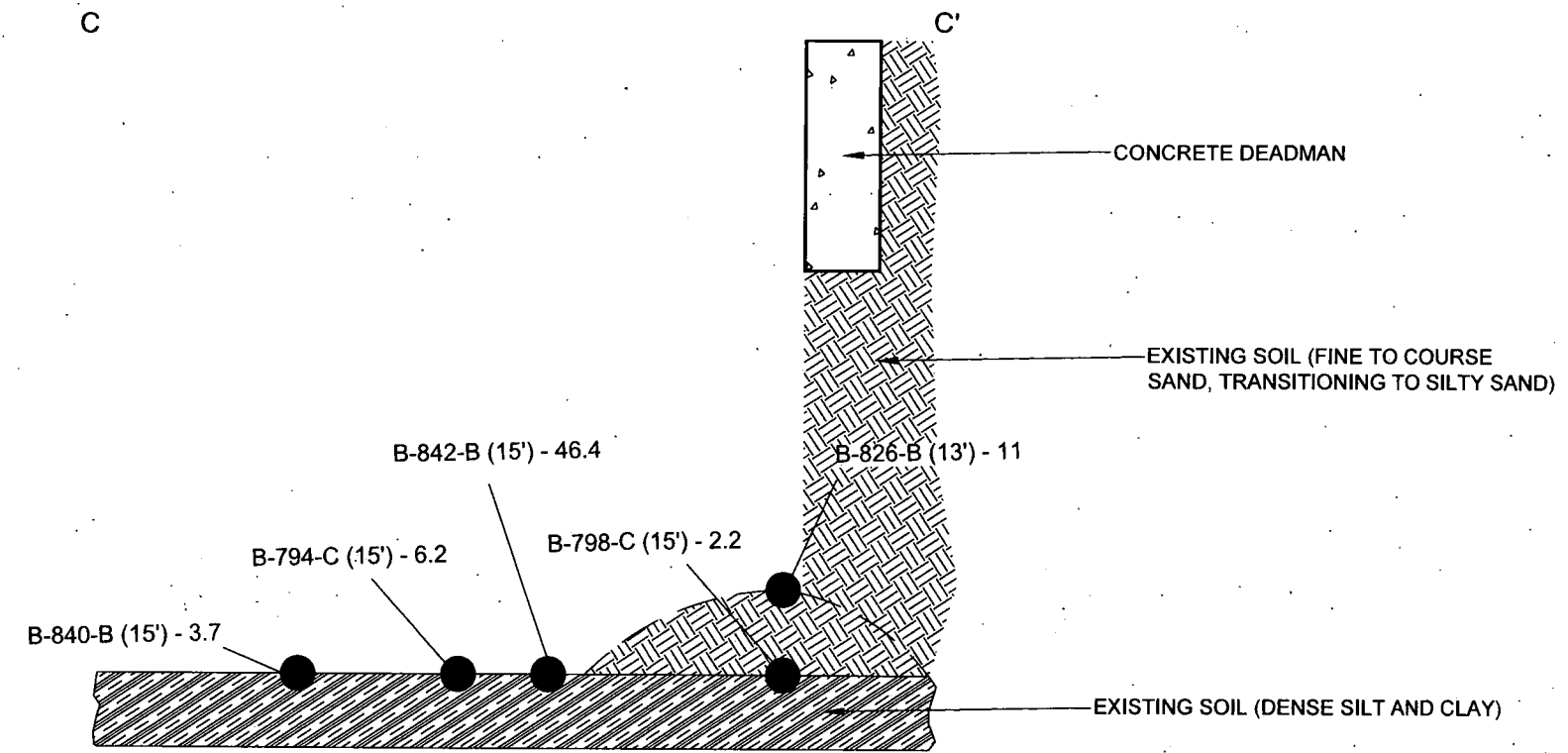
Mobile: +1-732-762-4743, Email: joseph.guarnaccia@basf.com
Postal Address: BASF Corporation, 100 Park Avenue, Florham Park, New Jersey 07932, United States


We create chemistry

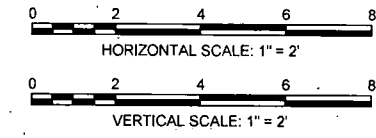


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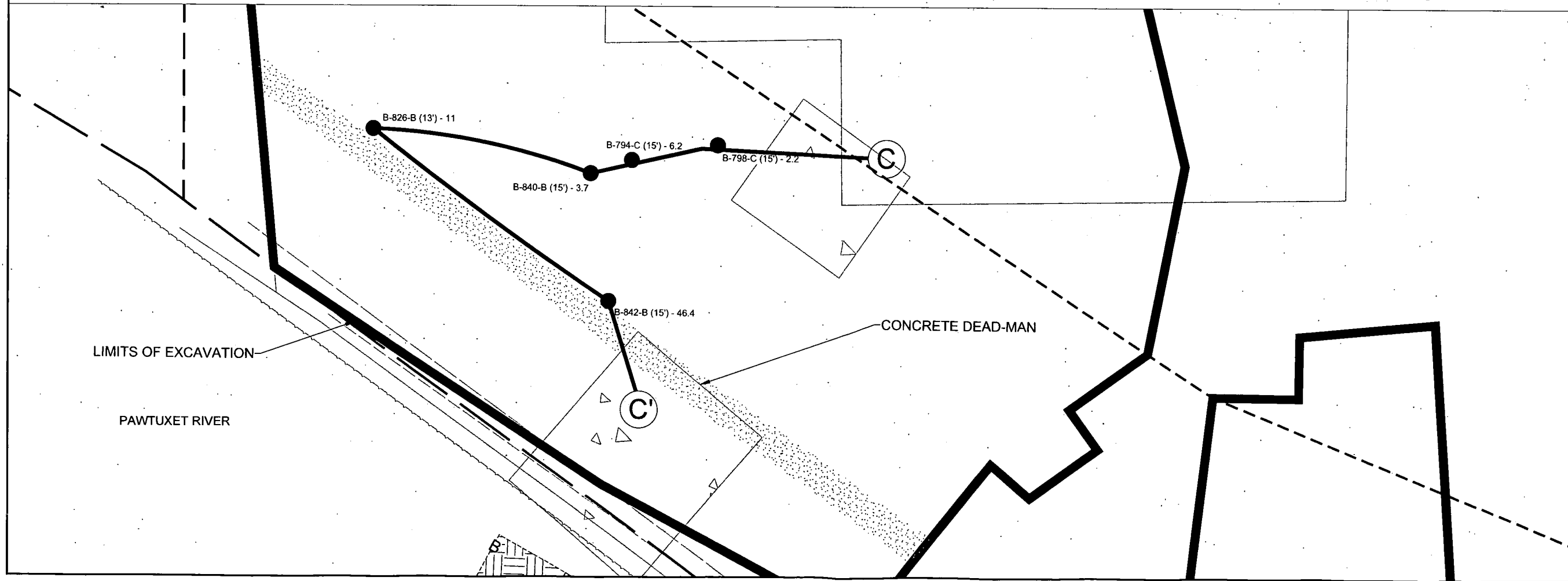
645529



DETAIL: TP-5 POST EXCAVATION BOTTOM SAMPLES > 1 MG/KG PCBs



GENERAL NOTES:
 1. FEATURES DEPICTED ABOVE ARE BASED UPON FIELD MEASUREMENTS PERFORMED BY AEI CONSULTANTS IN 2018.
 2. NUMBERS IN PARENTHESES ARE DEPTHS SHOWN IN UNITS OF FEET BELOW GROUND SURFACE.
 3. PCB SAMPLE RESULTS ARE SHOWN FOLLOWING EACH SAMPLE IDENTIFICATION. RESULTS ARE IN MG/KG.
 4. EPA APPROVAL PROVIDED ON OCTOBER 23, 2018 TO LEAVE PCB-IMPACTED SOILS WITH CONCENTRATIONS > 1 MG/KG IN PLACE.



PROJECT
 BASF FORMER CIBA-GEIGY
 FACILITY
 180 MILL STREET
 CRANSTON, RHODE ISLAND

AEI Consultants

DRAWING TITLE		REVISIONS		BY
TP-5 IN-PLACE PCB SAMPLES - DEEP EXCAVATION AREA		NO.	DATE	
		1	11/29/2017	AEI

AEI PROJECT NO.: 303655

DATE: JANUARY 30, 2019

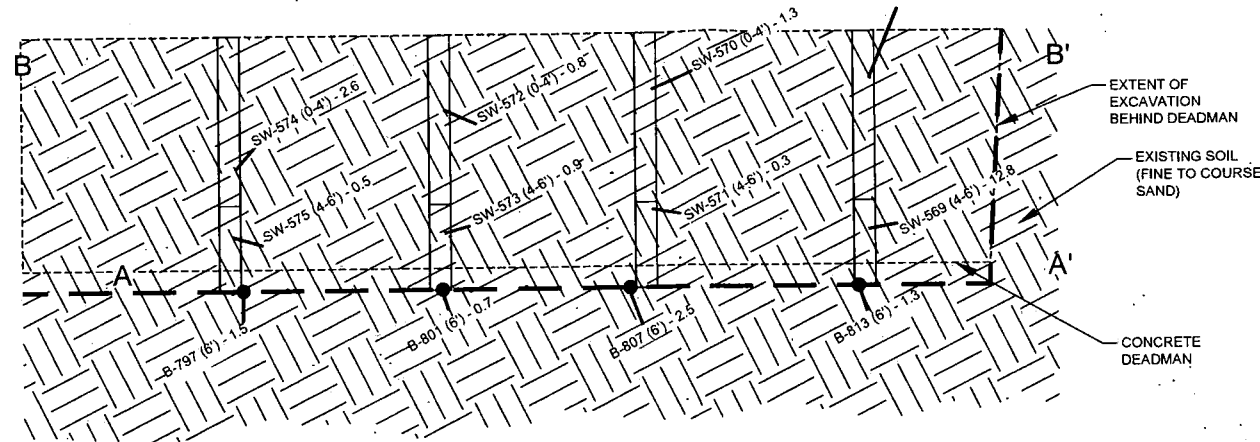
SCALE: 1" = 20'

DRAWN BY: A. TING

CHECKED BY: R. KOWALSKI

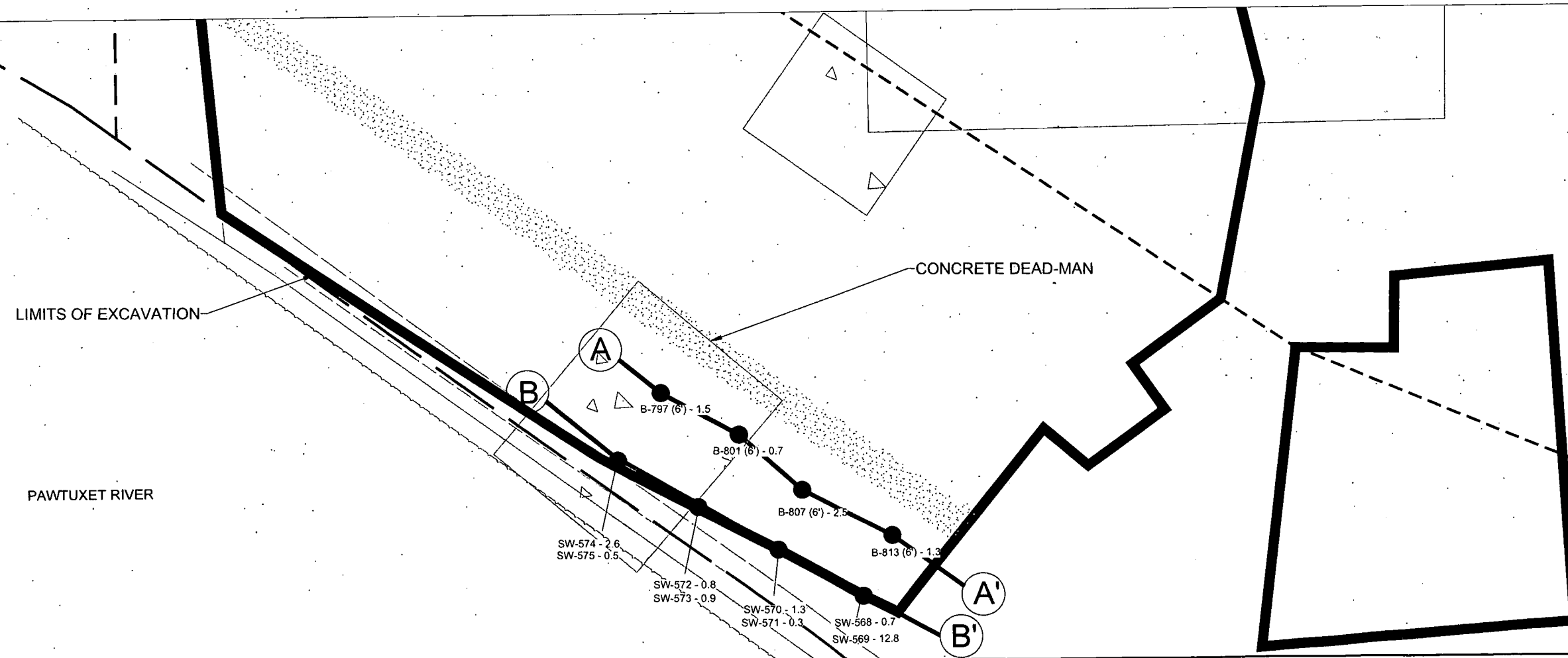
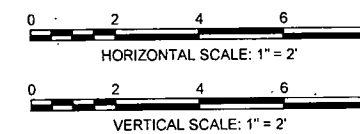
DRAWING NUMBER

14



DETAIL: TP-5 POST EXCAVATION BOTTOM AND SIDEWALL SAMPLES
LOCATED BEHIND CONCRETE DEADMAN (LOOKING TO THE SOUTHWEST)

GENERAL NOTES:
1. FEATURES DEPICTED ABOVE ARE BASED UPON FIELD MEASUREMENTS PERFORMED BY AEI CONSULTANTS IN 2018.
2. NUMBERS IN PARENTHESES ARE DEPTHS SHOWN IN UNITS OF FEET BELOW GROUND SURFACE.
3. PCB SAMPLE RESULTS ARE SHOWN FOLLOWING EACH SAMPLE IDENTIFICATION. RESULTS ARE IN MG/KG.
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AEI Consultants

DRAWING TITLE
TP-5 IN-PLACE PCB SAMPLES -
BEHIND DEADMAN

AEI PROJECT NO. 353655

DATE JANUARY 30, 2019

SCALE 1" = 20'

DRAWN BY A. TING

CHECKED BY R. KOWALSKI

DRAWING NUMBER

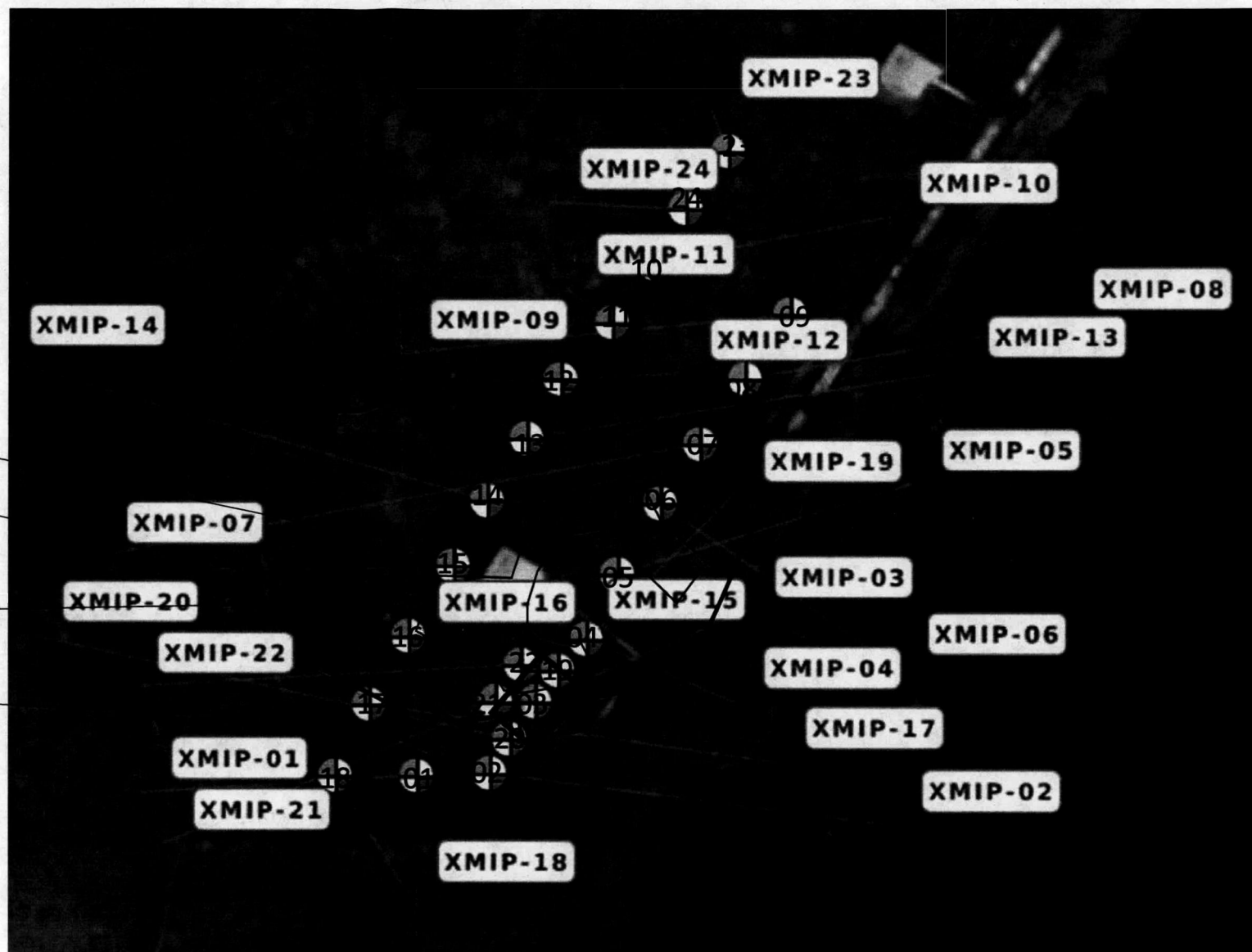
13

MIP location

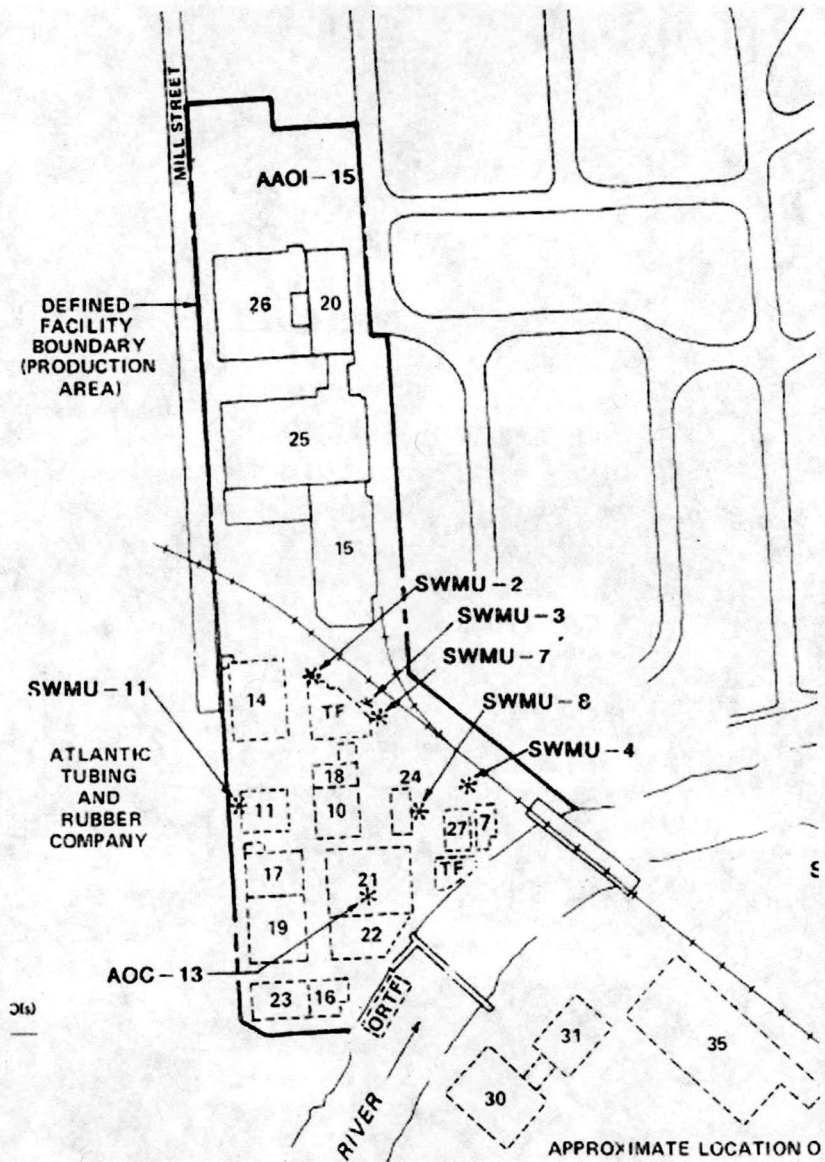
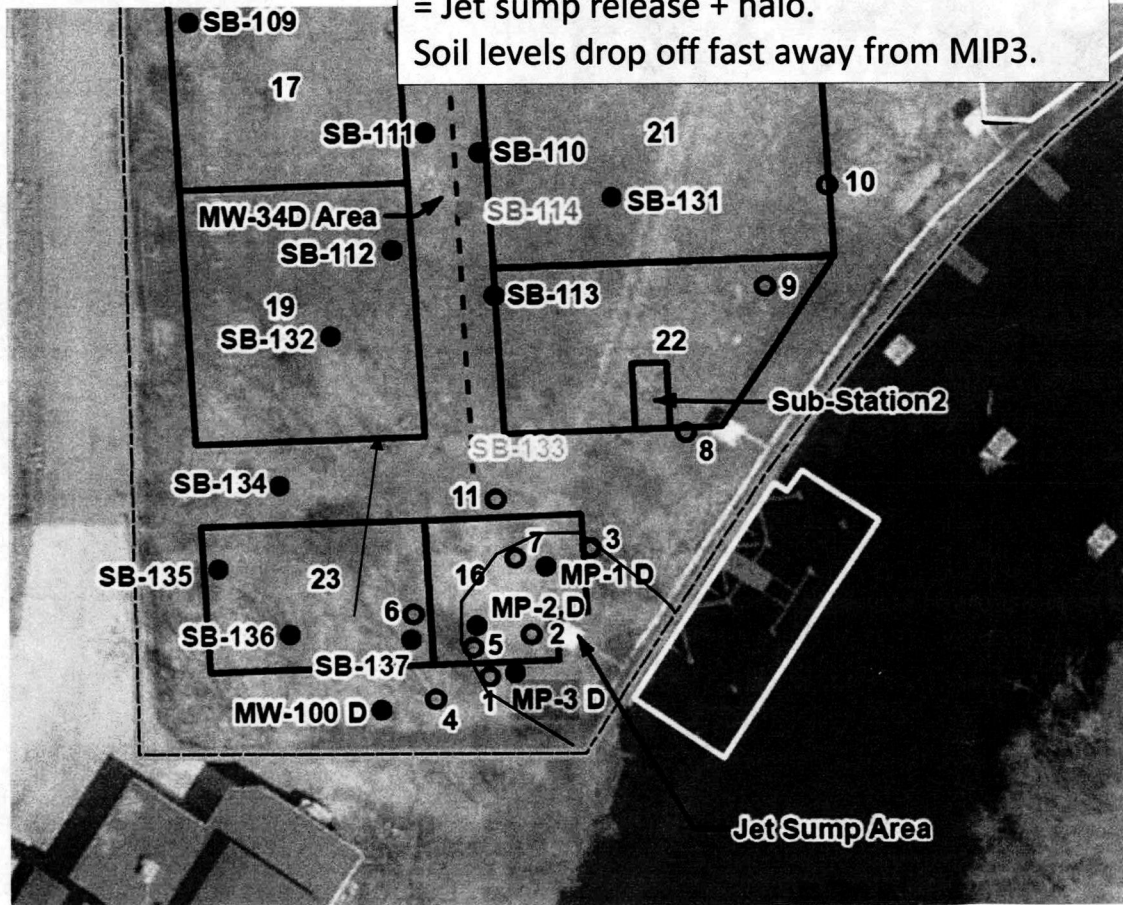
Soil excavation <8'

Soil excavation <15'

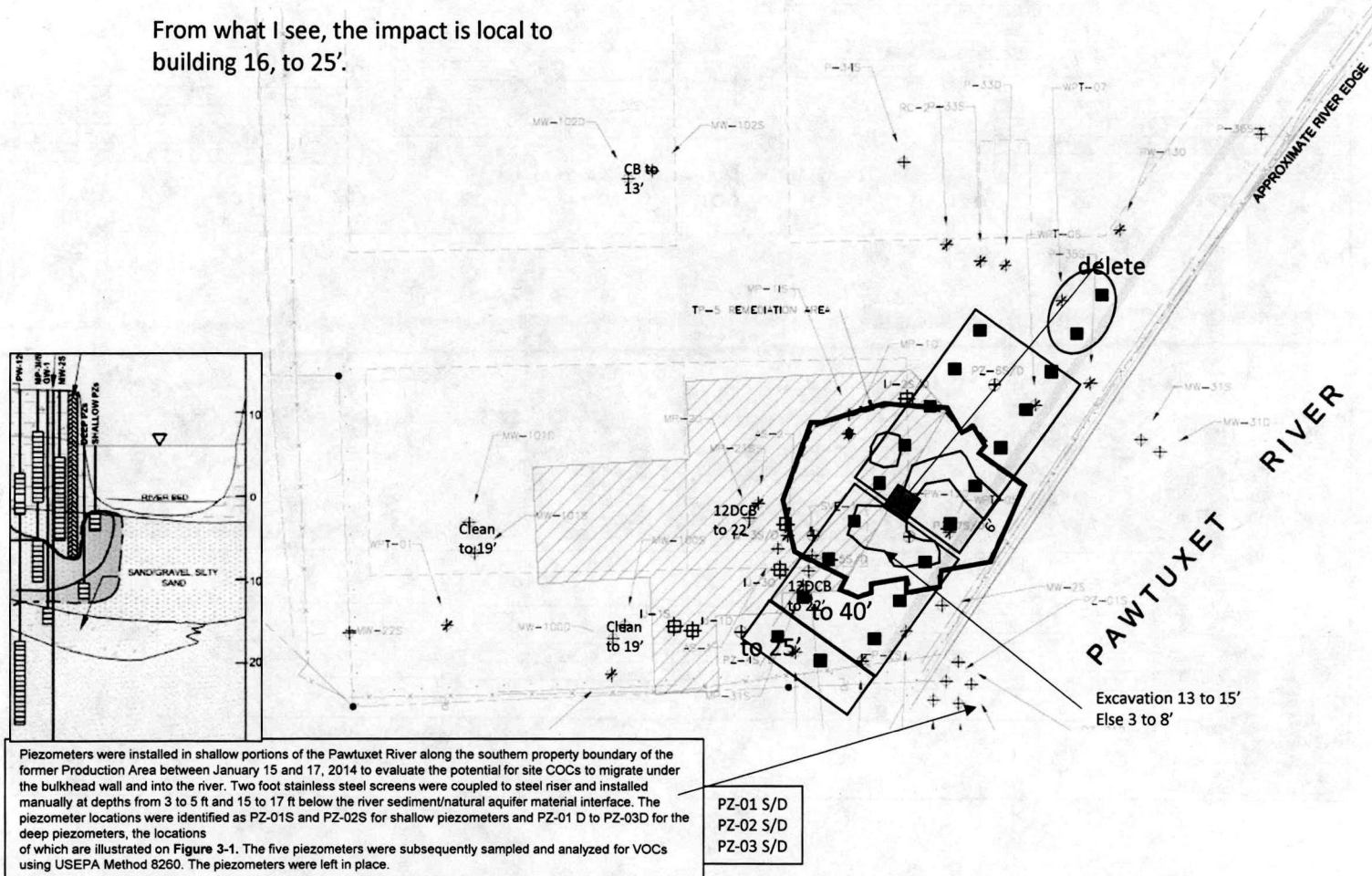
Hot spot

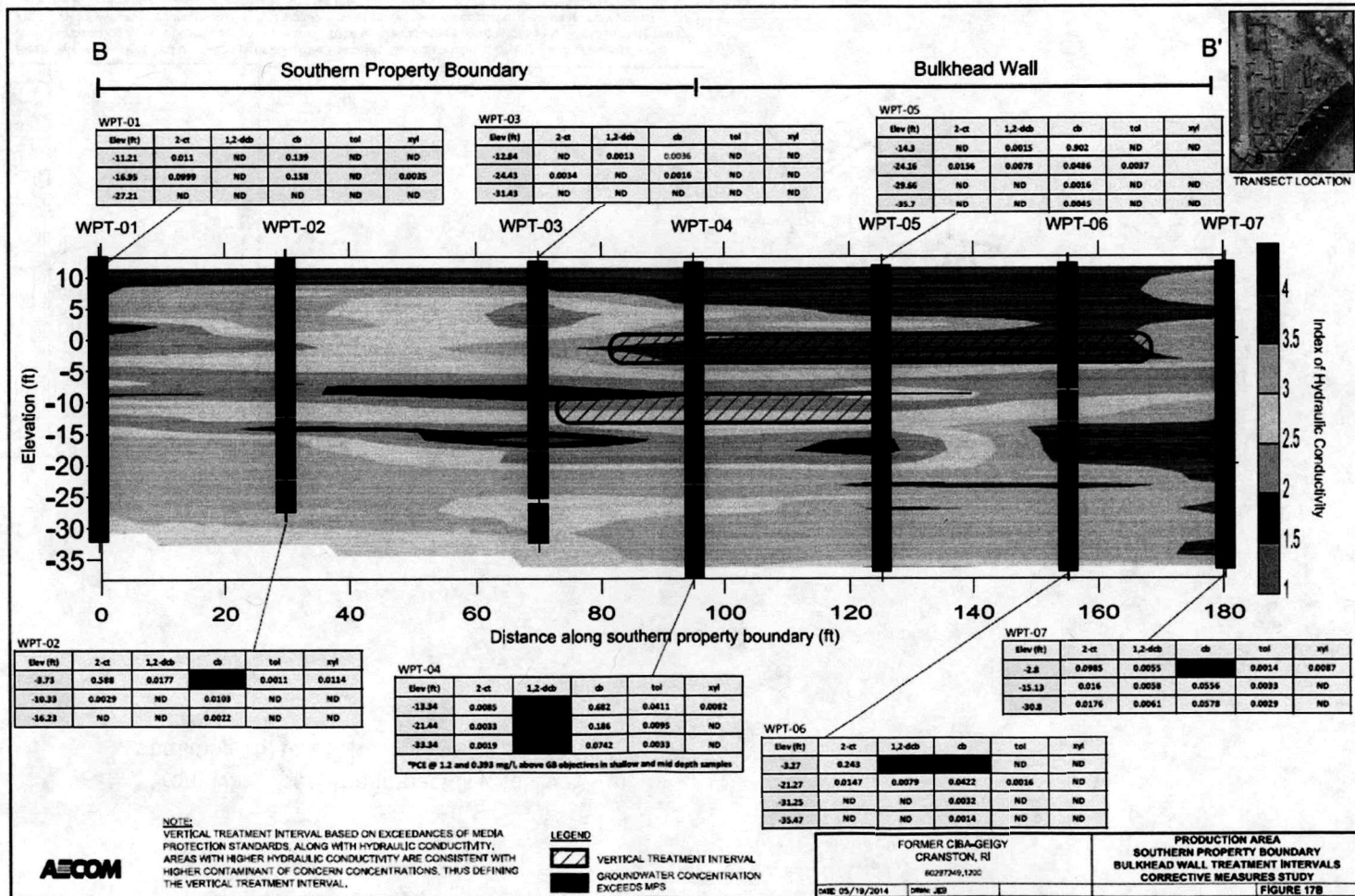


Area of impact implied by soil and GW data
= Jet sump release + halo.
Soil levels drop off fast away from MIP3.



From what I see, the impact is local to building 16, to 25'.

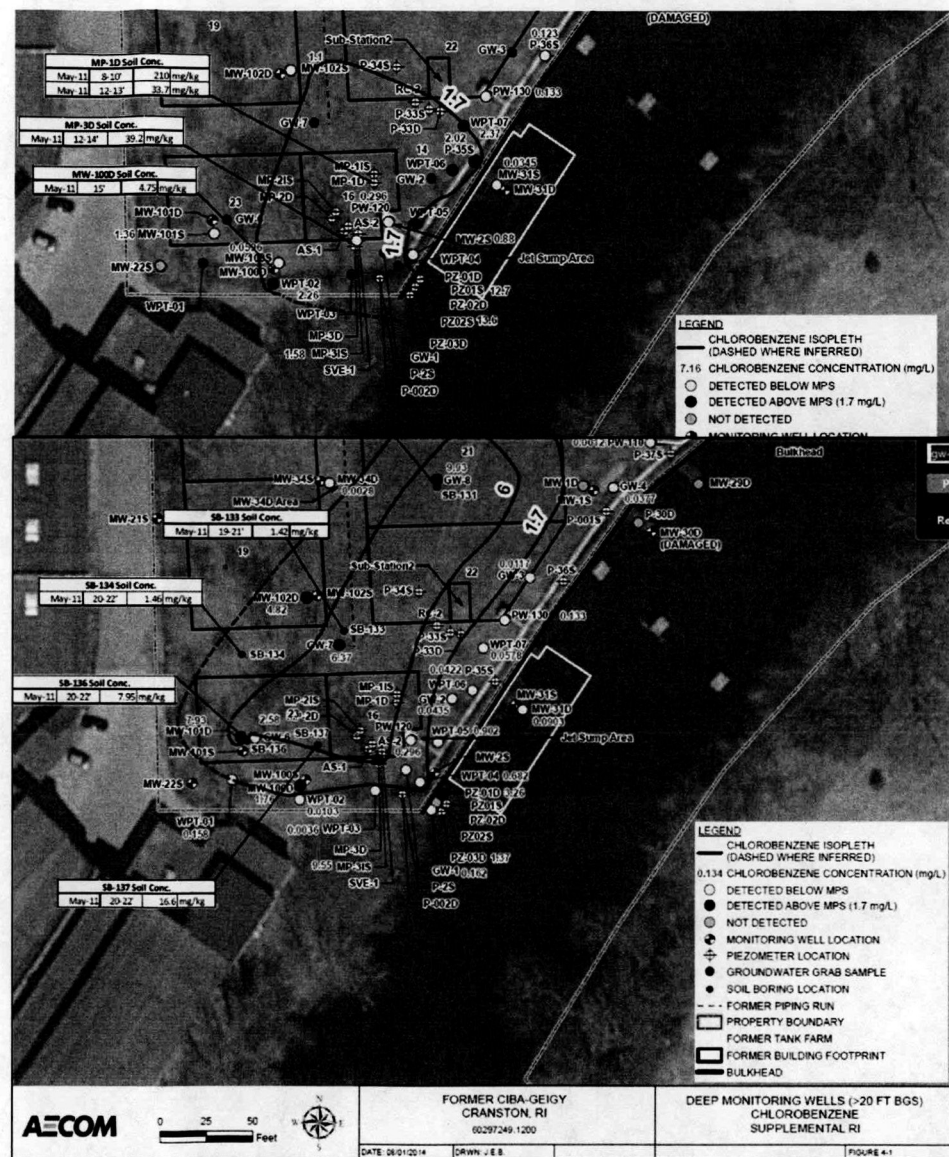




shallow

From SRI

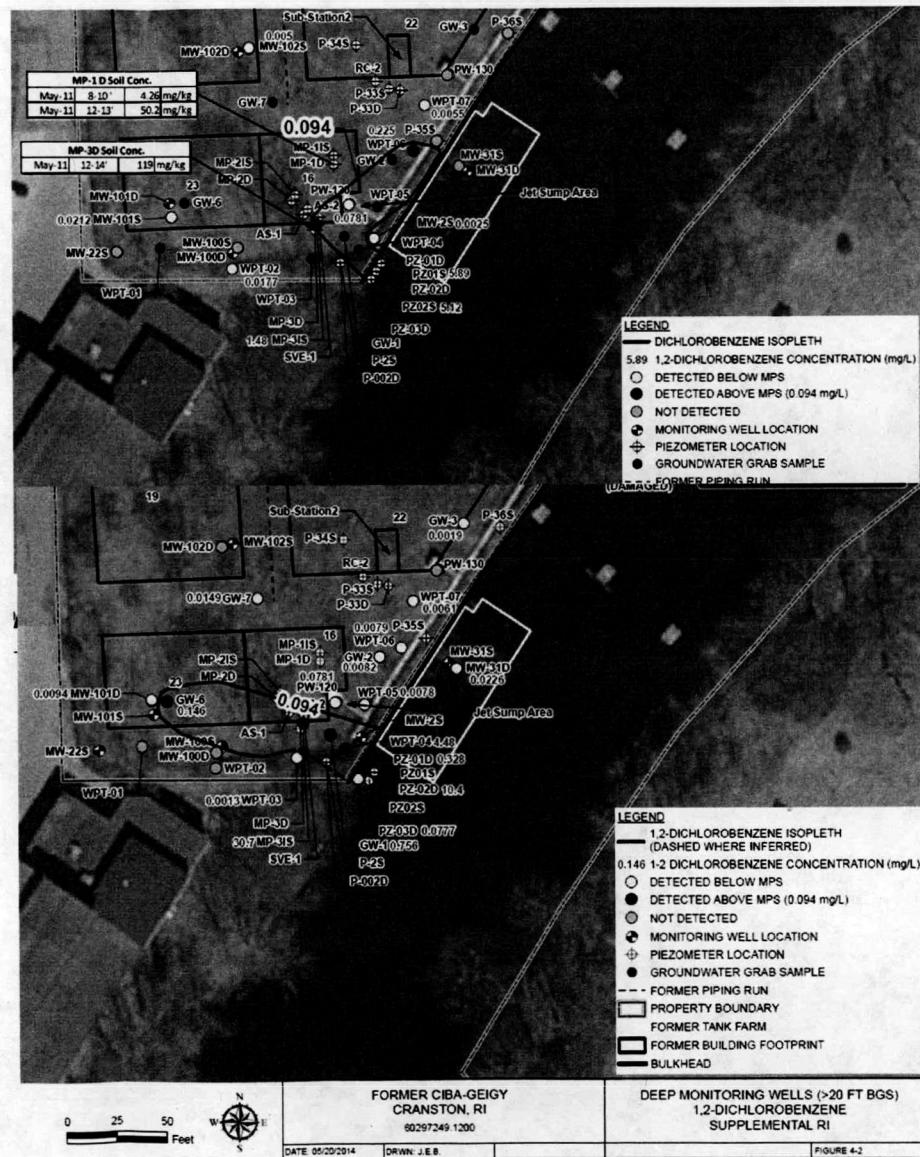
Deep



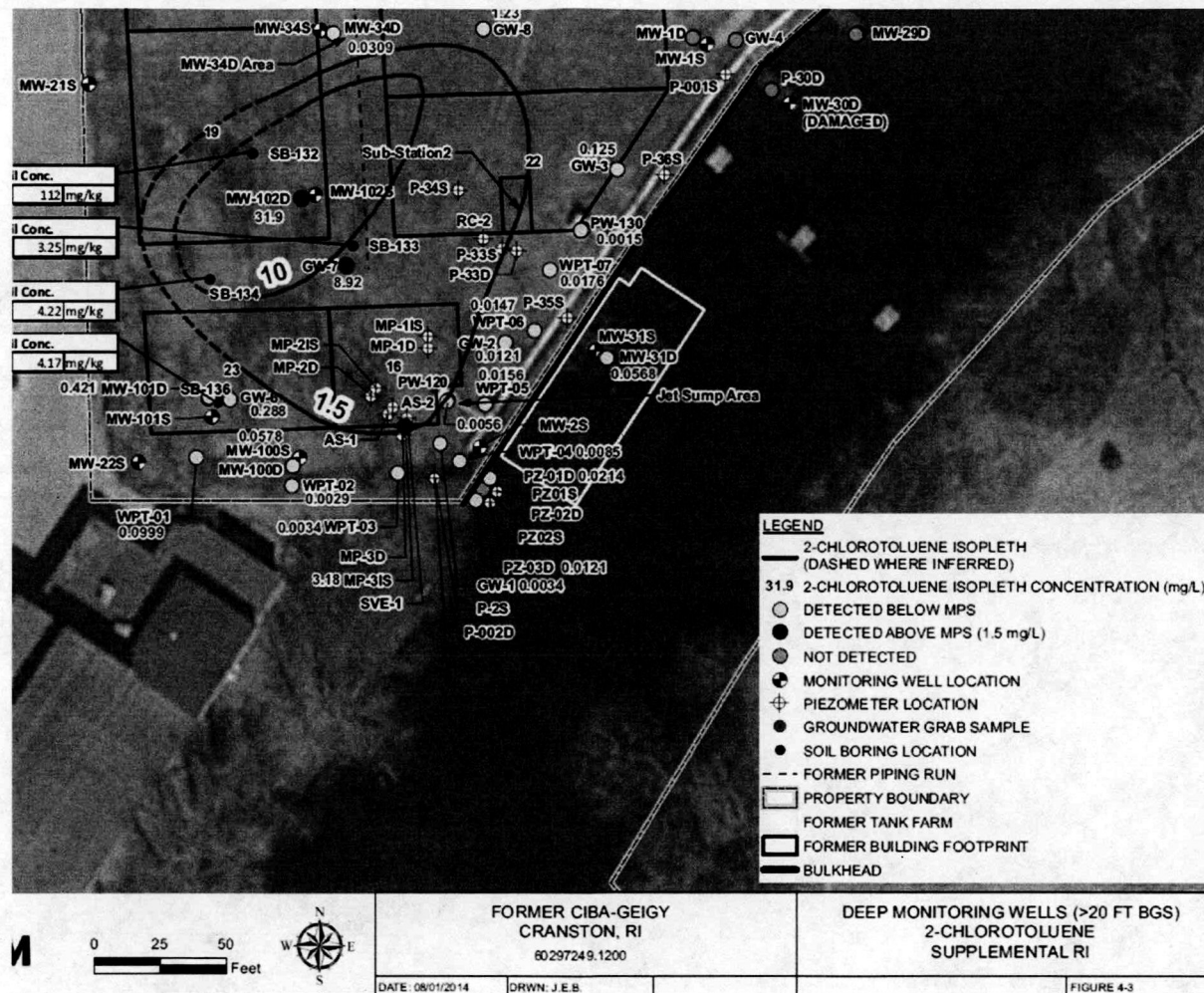
12 dichlorobenzene

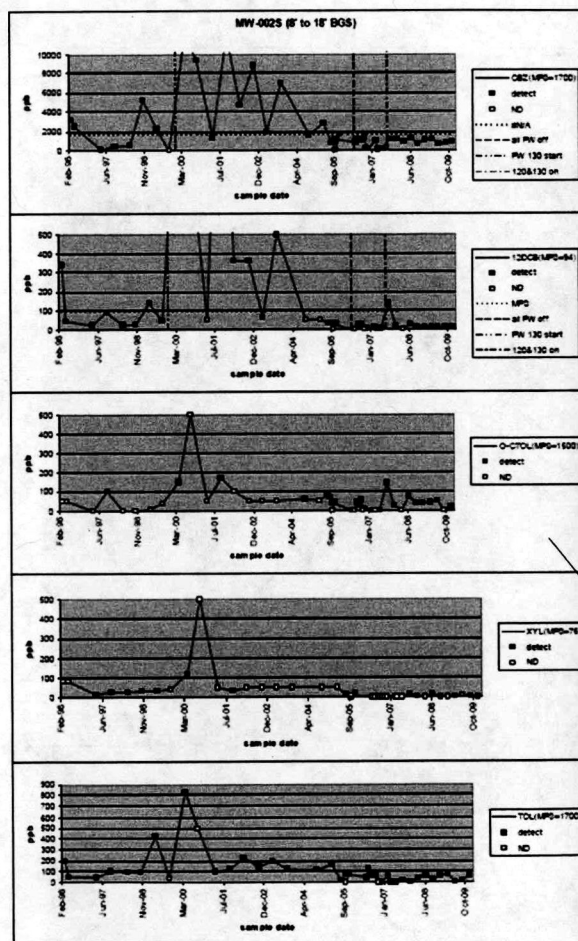
Shallow

deep



2 chlorotoluene deep





1998 to 2009.

